Systemic Power of the Digital Platforms Versus Human Lifeworld *

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Abstract

Digital ecosystems and platformisation are emerging phenomena that change our society by integrating technology into our everyday lives. Despite the benefits that technology offers, this tightening bond between technology and humans is problematic as technology has been shown to also bring negative consequences to people's lives. These consequences are acknowledged and in many cases have been taken into account in research and practice. However, we still lack explanations regarding the mechanisms that cause these negative impacts in the first place. In this paper, we present an ontological viewpoint based on Habermas' systemic power/lifeworld model, which offers an expressive framework based on critical theory to reveal the risks inherent in technology. We make visible how technology has a tendency to colonise the Lifeworld of people if not understood at the theoretical level and acted upon properly at the practical level. This will offer a philosophically solid basis and new insights for future research on digital ecosystems and platformisation to endorse human-centric and ethical digital society.

Keywords

Digital ecosystems, Platforms, Habermas, Critical theory, Digitalisation, Colonisation

1. Introduction

Digital ecosystems and the platformisation thereof are changing the structures of market economy [1], creating new business models [2, 3, 4, 5], affecting social interaction and changing political and public values. Digital platforms have a tendency to solidify the position and benefits of central, orchestrating companies in the field, all while diminishing the opportunities of competitors and individuals the field [6, 7]. These changes are all paired with potential unintended consequences and ethical implications that need to be thoroughly considered. Consequently, there seems to be a strong need for giving an established role – if not a central focus – to research in ethics when studying contemporary technologies [8].

Artificial Intelligence in particular has raised ethical concerns regarding emerging technologies, which has led to creation of a plethora of AI ethics codes and frameworks for governance [9, 10, 11]. Meanwhile, in academia, the discussion around ethical implications of technology can be traced back to the seminal articles titled *"What is computer ethics"* by [12] and *"Four ethical issues of the information age"* by [13] published almost four decades ago – a point from where ethics has slowly started to draw attention among technologists. Research has shown that there are problematic issues that has been brought upon us with and by IT and have risen the demand and implementation of protecting initiatives, such as legislation [14, 15], ethical codes[11] and sustainability frameworks[16].

Most of the research focusing on IT ethics seems to be analysing the emerging problems and solutions for those problems, which is undeniably important and needed. However, such approach does not offer tools for preventing the problems from occurring in the long run, because the focus is

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on fixing the symptoms rather than addressing the root causes that make things go wrong in the first place.

Therefore, instead of focusing on solving specific problems arising from digital ecosystems and platformisation, we aim to reveal the *ontological foundations* of these problems. To do so, we rely on the work of Jürgen Habermas [17, 18, 19] and more specifically to his idea (critical theory) of dividing societies into two dimensions, *systems* and *lifeworlds*, which are based on different ways of existing in and affecting the world that are often at odds with each other. Through this perspective to ontology of the digital ecosystems and platformisation, we hope to contribute to the prevention of unethical outcomes before they occur. In doing so, we wish to help reveal root causes—in Habermasian terms, colonisation mechanism build in the systems —for ethical challenges specific for digital societies, which will hopefully mitigate the risk of falling merely into technological determinism and overlooking societal aspects of technology. All while recognising that the present paper is only an initial opening of discussion, we believe this to be a necessary step in order to tackle specific problems brought forth by the domination of digital platforms and ecosystems by only a few of actors in the field.

The paper is structured as follows: In the next section we present our philosophical stance and research approach based on Habermas's theory of systems and lifeworlds. In Section 3, we discuss the application of this theory construction through examples and earlier works around the topic. In Section 4, we end up with conclusions and potential research topics where the framework would be particularly fruitful.

2. Philosophical stance: Lifeworld and Systems in Habermas's critical theory

It is reasonable for a reader to question why we have gone all the way back to the philosophical foundations of knowledge rather than a commonly used empirical research methodology to obtain information about consequences of digital ecosystems and platformisation. This choice arises from the very philosophical foundations of research itself. Like Hassan et al. [20] stated: *All research is philosophy in action.* Therefore, the philosophical position helps us look at the basis of our assumptions and to evaluate the research we are conducting [21, 22, 20]. Philosophical approach also enriches research by offering new insights and viewpoints instead of relying only on more traditional interpretative research methodologies [23, 24].

Research always comes with unanswered philosophical questions. Yet, under the academic publication pressure, word limits and case-specific focuses, they get easily neglected or to taken for granted, which is why regularly revisiting the philosophical foundations of research is important. These questions are related to different branches of philosophy, namely metaphysics, epistemology, rational inquiry and axiology (including ethics), all of which should be considered by a researcher when conducting research [20]. In the current landscape where information systems (ISs) are ever more complex [25] and underpinned by scalability, unpredictability, socio-technical dimensions and low transaction costs, technology is ever more pervasive in our everyday life and thus calls for new, innovative and holistic theorising and knowledge creation [26]. This is where inspecting the ontological assumption through philosophy can be of help.

The position presented herein stems from critical theory. This approach, emphasised by, e.g., Mingers et al. [27] and Cukier et al. [28], offers a viewpoint that shifts the focus towards the underlying causes for problems. Critical research is concerned with questions such as freedom, autonomy, and human emancipation [29], which often manifests itself as a study of power relations in society [19, 30, 31, 32]. In addition to increasing understanding, critical theories offer a pragmatic approach to knowledge by aiming at changing society by challenging existing paradigms and suggesting alternatives [33, 34, 35]. This emancipatory and deliberative perspective [30] can be seen essential for enabling a better world [36]. Thus, the approach presented here is builds on critical theory and uses the philosophical argumentation for analysis, aiming to give a deeper understanding

and pragmatic, scientifically justified critique to encourage more ethical development and deployment of ISs.

We base our approach on Habermas's model of lifeworld and systems. In his *Theory of Communicative Action* Habermas introduces an idea of dividing the society into two dimensions, systems and lifeworlds, based on their nature of communication and coordination. According to Habermas [17, 18, 19], a lifeworld is a dimension that is shared by individuals connected to each other's lifeworlds. Thus, one's lifeworld is an arena of communicative construction where they encounter others, communicate, and observe the world. Systems, in contrast, are based on power structures that are rooted in systemic integration. For Habermas, these include economic systems, political systems and administrative systems, where actions serve the institutionalised goals of the system. Notably, systems are not separated from the lifeworld but part of it. Even though the role of the system–lifeworld-division is less prevalent in his later works, it remains in the background throughout Habermas's discourse theory of society.

This lifeworld/systems model can be used to reveal fundamental issues that underly emerging problems of digital ecosystems and platformisation, enabling researchers and practitioners to address them accordingly. Habermas introduces concepts, such as human interaction and rational communication, that may help us seek a new commonly acceptable way to encounter platformisation and create ecosystems that are more human-centric [37, 7, 38]. Thus, this approach offers a viewpoint that helps us discover underlying ontological mechanism that are rooted in how technology is appearing to us and how we are mastering it. This viewpoint is relevant for analysing the past, current, and future problems of digital ecosystems and platforms as well as the accompanying services and products, which we will next discuss in more detail through contemporary examples of platformisation of digital ecosystems.

3. Platformisation as accumulation of systemic power in digital ecosystems

In an ideal situation, systems are part of the lifeworld in a balanced way, enabling communicative action and discourse compared to mere strategic action. However, it can occur that systems become to colonise the lifeworld. In the context of digital platforms, colonisation seems to be connected to the ever-growing collection and accumulation of data, described as data colonialism, which has normalised the exploitation of humans trough personal data [39]. Van Dijck [40] has visualised this as a platformisation tree, the roots and branches of which reach all sectors of society while dominated by the tech giants. [2, 41], on the other hand, calls this kind of economy surveillance capitalism that is based on the logic of accumulation, where data is collected from a multitude of sources, then extracted, analysed, commodified, and finally used to make profit. This form of capitalism based on data platforms is global in nature and driven by systemic powers beyond reach of individuals and often also of national governments. For example, the US legislation (Section 230 of the Communications Decency Act of 1996) protecting the platforms by lifting the liability for unlawful content serves as a useful illustration of how the systemic power is in part protected by other institutions [42].

Platforms seem to play an increasing role in data colonisation as a way for companies to move from data mining to data farming [43, 44, 45, 46]: instead of relying on extracting random big data, companies build their platforms in a way that yields data that fits their purposes. Correspondingly, digital platforms can be seen as (often an extremely large-scale) algorithmic simulation that provides companies with data that best serve making profit.

This colonisation happens when the platform dominates individuals' lifeworlds to reach the system's needs and thus limits the space of the lifeworld of the people within the system. Hence, Information Technology (IT) itself can be described as a systemic power as it sets the demands and significantly affects people's lives. Our society and governments are largely based on services that are dependent on IT. Likewise, our everyday life is filled with IT, and most of our digital services are

built upon just a few main platforms (a reason of which those are deemed gatekeepers in the recent EU legislation).

This course of development can be subjected to critique for several reasons. Like Couldry and Mejias [39] have noted, we should resist against building societies based on this kind total algorithmic control, because it reduces humans into a mere resource for economic purposes. This does not mean rejection of data collection and use altogether, but instead encourage steering the current logic of accumulation that drives platformisation and digitalisation towards more humanistic and ethical direction called for by IS researchers since the earliest developments in computer ethics [47].

Another illustrative example of this colonisation by platforms is presented by [48] in their article introducing a concept of lifeworld economy. Lifeworld economy approach is an attempt to loosely apply Habermasian arguments and his lifeworld-system model to a different ontological framework. Elder-Vass provides a novel way of looking at the platform economy by dividing it into lifeworld economy and system economy. The system economy can be seen as the capitalist economy performed in the markets, which is commonly seen as the normal economy. However, there are other kinds of activities (gift economy, feudalism, self-production, etc.) that could be seen as economies which actually have various overlapping manifestations.

Elder-Vass [48] sees that dualistic distinction of systemic powers and the lifeworld is not fruitful, because the two can overlap especially in the context of IT. Elder-Vass uses Amazon as an example: From the perspective of systemic power, the seller and the buyer are instrumental objects that are coordinated by systemic rationality. This rationality is based on an algorithmic (therefore, systemic) process. However, Amazon has also incorporated lifeworld aspects in its services. There is a possibility to write and read reviews and discuss the products, both of which are communicative actions that affect the purchases made. However, these review communication channels are published for strategic reasons even if they create a channel for communicative action. [48] Even though a clear demarcation of lifeworld as good and systems as bad is tempting, the example of Amazon demonstrates that reality usually lacks this kind of clear distinctions. In fact, it can be argued that it is precisely in these grey areas that colonisation of the lifeworld by systems happens, as it represents how the systemic power expands the area which used to belong to the lifeworld, and this process happens in the grey area between systems and lifeworlds.

Zuboff [2], on the other hand, noted that we have not been able to successfully define what big data is because we have looked at it as technological phenomenon, which prevents us from seeing its other relevant aspects. However, Zuboff claims that it originates in the social and thus should be analysed not technologically but from a social perspective. The problem here is that humans are controlled with technology, which is done out of sight if not specifically revealed [49, 50]. Sinnerbrink [50] offers an acute description on how information technology is unnoticeable, transforming the actual to become a standing reserve: "The computer is an information interface, the mobile telephone a "personalized" communication resource on permanent standby; we ourselves become communication resources permanently "on-call" within social, electronic, and economic networks". In the grey area, it is indeed the systems that hold power over the course of events with technology, not the individuals experiencing the lifeworld. Therefore, we argue that the mechanisms of the phenomena discussed here can be better understood by approaching them through the concept of lifeworld colonisation.

Thus, even if it would be arguably unfruitful to fully turn our back to technology and neglects its lost potential, we can change the role it has for us in our lifeworld. We can aim to understand why technology and other systemic powers are invading the lifeworld. We can analyse the meaning of technology for ourselves and for our being here. We can refuse to use technology as expected, and instead search for a way of living that makes sense for us.

We need to develop and govern IT in a way that respects individuals (lifeworlds) and their autonomy instead of only feeding economic and corporate powers. Nevertheless, we are bound to use technology, and most of us are happy—or at least content—with the possibilities it offers us. Instead of having a negative or a passive stance against digitalisation, we should focus on preventing

the colonisation of our lifeworld by IT. We should seek possibilities to protect the life of individuals—lifeworlds—so that the outcome of using IT would create positive effects for individuals and mitigate the negative ones. In the end, these platforms and ecosystems are ever more prevalent, if not necessary, for many people, and hence are already an integral part our everyday life. Thus, there is an urgent need to emphasise the role of people and society—as markets on their own will not provide solutions that serves society [51].

4. Conclusions

In this paper, we have delved into the ontological foundations of information technology to present an initial theory of a mechanism through which it impacts human lives and societies. We have presented a critical approach that draws from Habermas's model of systems and lifeworlds, and tracks the negative impacts of IT on humans back to the way in which it colonises our lifeworlds as a form of systemic power. Using platformisation of digital ecosystems as an example, we have discussed several typologies that target the intersection of systems and lifeworlds and showed that the ongoing phenomena and perceived issues can be conceptualised using the terminology of colonisation of lifeworlds by systems. Therefore, we argue that the platformisation of digital ecosystems and platformisation serve as an illustrative example of manifestations of systemic power in society that is colonising the lifeworld, driven by technological, economic, administrative, and political powers implemented trough technology.

That being so, the present approach offers a viable path towards better understanding of the mechanisms in which IT affects people and societies. Meanwhile, this is only the first step towards a solid, philosophically justified framework and thus raises several questions for further research. However, we believe this to be a useful approach to study, for instance, how the European legislation, such as the Digital Services Act or the EU AI Act shapes the impacts of IT on people, or how the recent developments in the ownership of the platform X, formerly Twitter, impacts the power relations and the public discourse in the digital sphere.

Declaration on Generative AI

The author(s) have not employed any Generative AI tools.

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